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BEFORE THE

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FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON, D.C. 20554

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FEB 24 1993

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of:

Replacement of Part 90 by)
Part 88 to Revise the Private)
Land Mobile Radio Services)
And Modify the Policies)
Governing Them)

PR Docket No. 92-235

To: The Commission

Comments Of The
Florida Department Of Transportation

The Florida Department of Transportation submits an original and nine copies of comments in the above entitled matter.

Respectfully,

[Signature]

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Statement of Interest In This Proceeding

The State of Florida, Department of Transportation is responsible for all state and federal highway programs in Florida, including FCC Highway Maintenance Radio Service applications for the road crews and FCC Local Government Radio Service Motorist Aid Call Box license applications statewide.

The Traffic Engineering Office is assigned the statewide responsibility for radio communications systems and radio communications engineering for the Department and is the American Association of State Highway and Transportation Officials (AASHTO) Frequency Coordinator for Florida. Therefore, all spectrum availability, utilization, interference and frequency coordination issues are of direct concern to the Department and to the Traffic Engineering Office.

COMMENTS BY PARAGRAPH, IN ORDER PRESENTED

I. Introduction, Paragraph (2)

1. The Department concurs with the Commission's position that "the quality of PLMR communications will likely deteriorate to the point of endangering public safety and the national economy." Unless some changes to the Part 90 Rules be implemented that address spectrum use efficiency. However, any change must be considerate of both the needs associated with each unique radio service and must be considerate of the implementation logistics associated with the change to narrowband technology. The Florida Department of Transportation has just contracted to replace all of the Department's land mobile radio system. This upgrade was funded by taxpayer dollars and the new equipment has an estimated fifteen (15) year life expectancy. any new FCC ruling should allow for the grandfathering of systems such as described herein to avoid the unnecessary waste of tax dollars.

III. Discussion, Paragraph (6)

2. The reference to "...four major proposals..." appears to include two redundant proposals, one and four. Proposal one addresses improving spectrum efficiency by increasing channel capacity per unit of spectrum and proposal four addresses (spectrum efficiency by Implication) new technical and operational standards requirements relative to increased channel density. It appears that proposal one is dependent on the implementation of the narrow

band technology described in proposal four and proposal four would not be necessary unless the channel density plan described in proposal one was adopted. If channel density is to be increased, then new technical performance specifications must be adopted to provide the narrower band equipment required to fulfill the new channel density delineated herein. Both bandwidth and effective radiated power (ERP) must be addressed if the new channel capacity requirements are to be realized. However, it is recognized that some technical standards are not necessary to increase channel capacity and may be addressed in the fourth proposal which then could specify channel loading requirements.

III. Discussion, A. Spectrum Efficiency Standards, Paragraph (8)

3. The Department generally agrees with and supports the narrowband technology standards. However, it is suggested that the Commission further specify a block of 72-76 MHz channels for exclusive use for motorist aid call box systems. This would be consistent with the Part 90 Rules, 90.241(a) and would also address the specific needs of the Public Safety issues related to the motorist aid call box operation and its associated operational liabilities.

III. Discussion, A. Spectrum Efficiency, Paragraph (10)

4. The Department disagrees with the proposed loading incentives because there is no consideration for the governmental entity. If the Commission allows special consideration as an incentive to

licensees that can move toward early implementation of new technology, the Commission will be disregarding the governmental agencies, especially the public safety licensees that must, by law, follow a budget-bid-procurement process which usually requires one (1) to five (5) years from conception to implementation. It is the Public Safety agencies that have the greatest and most important needs and it will be these Public Safety agencies that will be penalized by the incentive wording of this proposed paragraph. It is therefore recommended that special incentives be deleted from all Public Safety channel loading rules to avoid this discrimination.

III. Discussion, C. Radio Services, Paragraph (14)

5. The Department wishes to recommend that any consolidation of the nineteen (19) existing radio services be limited to the radio services that are seeking to consolidate. It is further suggested that where radio service coordinators are doing a good job, such as AASHTO, and provide a unique service to their interest group, that the Commission allow these services to continue to function without change, interference or consolidation.

6. The Joint Commenters (SIRSA, NABER, API, AMTA, TELFAC, CISS) have interests and agendas that are not in accordance with the AASHTO mission and any combining of or consolidation with these interest groups will be deleterious to the highway maintenance radio user mission. The FDOT opposes the proposal to consolidate

the current radio services on the grounds that current interservice sharing rules work.

7. In addition, it is not unusual for considerable channel loading differences to exist between different radio services, even in the same band. The business radio service loading and most public radio service channel loading should have considerable variations in usage due to the different requirements associated with these services. This is as it should be. Public Safety Radio users must have enough channel security to prevent loss of life caused by harmful interference. Highway maintenance radio users generally require large coverage areas. These differences appear as channel loading variations when, in fact, the variations are not as different between the users of the same radio services. It is therefore important that the Commission support the Public Safety Radio Service community and avoid any channel sharing between the public safety community radio users and the other radio services. The safety and welfare of the public safety community depends on the security of its communications system. Any reduction in the security of the public safety user radio channels will result in an increase in the personal risk of public safety personnel employed by these agencies.

III. Comments, C. Radio Services, Paragraph (17)

8. The Department recommends that the Commission adopt a modified wording for the subject paragraph's second proposal that ensures

that each radio service have contiguous radio channels. Any interleaving of channels that result in adjacent channels being assigned to different radio services will cause interservice sharing coordination delays that can be avoided. Any additional channels made available through narrow band rules should be assigned to the radio service already coordinating this segment of the spectrum. In the event that the additional channels generated by the narrow band rules exceeds the total number of channels that

Therefore, it is recommended that the Commission consider either removing the shared coordinator wording or require that all coordinators use one FCC approved database.

III. Discussion, D. Technical and Operational Rule Changes,
Paragraph (20)

10. The Department understands that '6 is shared and adjacent

III. Discussion, D. Technical and Operational Rule Changes,
Paragraph (21)

11. The Department supports the Commission's consideration for "...low power, itinerant wide-area, and mutual aid operations." However, it is recommended that low power systems and high power systems be assigned different blocks of channels. The intrinsic incompatibility of these two systems can have a profound and pernicious impact on the low power system's performance when sharing channels with high power systems. In Florida, the low power 72 MHz motorist aid call box system is regularly interrupted by high power radio paging companies sharing the same channels.

III. Discussion, D. Technical and Operational Rule Changes,
Paragraph (23)

12. The Department wishes to limit its comments to the part of this proceeding which relates directly to Highway Maintenance Radio

addition of new licensees in a narrow band channel scheme at this early date. Increasing channel density will require major receiver modifications or replacement. New technology will be required to fulfill this goal. Therefore it is recommended that sufficient time be allowed to phase out old equipment with new narrow band technology equipment. The economic impact on the entire LMR community, including radio manufacturers will be momentous.

Appendix D, Proposed Rules, Part 88.305 (d)(3), Exceptions

14. The Department does not agree to excepting frequency coordination for the 72-76 MHz band. Lack of frequency coordination protection for the motorist aid call box system in Florida has resulted in many outages caused by interference from co-channel and adjacent channel licensees, especially high power paging systems licensed under the rules of Part 22.

15. It is recommended that the Commission delete this exception and establish a rule that requires frequency coordination for all 72 MHz channels available to call box applicants.

Appendix D, Proposed Rules, Part 88.1263, Radio Call Box Operations

16. It is recommended that the Commission establish a group of 72 MHz low power call box frequencies specifically for call box applications. These frequencies should not be available for use by non-Public Safety Radio Service applicants and especially should not be available for licensing by Part 22 paging systems.

17. The Commission should consider isolating at least ten (10), preferably twenty (20) frequencies in the 72-76 MHz band for call box operations. Half the frequencies should be near 72 MHz (TV Channel 4) and half the frequencies should be near 75 MHz (TV